APPENDIX A

Constitutional and Statutory Provisions

Article 1, Section 8, Clause 8, of the Constitution provides:

> The Congress shall have Power . . .
>
> . . . .
>
> To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries. . . .

Sections 101, 102, 103 and 271(a) of the Patent Code of 1952 provide (35 U.S.C. §§ 101, 102, 103 and 271(a)):

> § 101. Inventions patentable
>
> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
>
> § 102. Conditions for patentability; novelty and loss of right to patent
>
> A person shall be entitled to a patent unless—
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of the application for patent in the United States, or
>
> (c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

§ 103. Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentabilty shall not be negatived by the manner in which the invention was made.

§ 271. Infringement of patent

(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

* * * * *

APPENDIX B

Opinion and Judgment of the Court of Appeals

No. 19825

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

UNIFLOW MANUFACTURING CO. and JEFFERSON ICE COMPANY, *Appellants*,

v.

KING-SEELEY THERMOS CO., *Appellee*.

APPEAL from the United States District Court for the Eastern District of Michigan.

Decided and Filed June 18, 1970.

Before PHILLIPS, Chief Judge, and PECK and BROOKS, Circuit Judges.

PHILLIPS, Chief Judge. This case involves the issue of infringement of a patent for an ice making machine. Appellant Uniflow Manufacturing Company (Uniflow) brought the action under 28 U.S.C. § 2201 for a declaratory judgment that U.S. Patent 2,753,694 (the 694 patent) owned by appellee King-Seeley Thermos Company (King-Seeley) was invalid and not infringed by Uniflow's ice making machine. Jefferson Ice Company, a distributor for Uniflow's products, intervened as a third-party plaintiff. King-Seeley

counter-claimed, charging Uniflow and Jefferson Ice Company with infringement of claim 4 of the 694 patent.

At trial Uniflow did not contest the validity of claim 4 of the 694 patent (the only part of the patent that King-Seeley charged was infringed), but contended that claim 4 as limited by the prior art was not infringed by the Uniflow machine.

District Judge Thomas D. Lambros held claim 4 of the 694 patent to be infringed by the Uniflow machine. He granted a protective injunction on the counter-claim and an accounting for damages, as well as attorneys' fees to King-Seeley. By stipulation of the parties bond has been posted in lieu of the issuance of the injunction. Uniflow appeals from the judgment under 28 U.S.C. § 1292(a)(4).

To understand the patent involved here and the nature of this controversy it is necessary to examine the history of the flake ice making art. There are basically two kinds of ice making machines: those that produce formed or cube ice and those that produce flake or chipped ice. This appeal is concerned with the latter type. In this opinion we will refer to the King-Seeley patented machine as the Trow machine after its inventor and the accused Uniflow machine as the Kuebler machine after its inventor.

Prior to the introduction of the flake ice machines most of the ice used by restaurants, drug stores and similar establishments was either cubed ice or ice that was crushed or chipped from larger blocks supplied by commercial ice supply houses. Flake ice for purposes of this discussion is ice composed of small flakes or chips having sufficiently high ice to water ratio that when placed in a storage bin it will not stick or mat together and easily can be scooped or measured.

By using one of the flake ice machines, a small establishment can manufacture its own flake ice at about one-tenth of the cost that previously was required to purchase the crushed or chipped ice from a commercial ice producer.

The Prior Art Nitsch Machine

Prior to the invention of the Trow machine involved here a flake ice machine had been produced by Nitsch. The Nitsch machine as well as the two machines here involved were designed to freeze water on the interior wall of a chilled hollow cylinder. Chilling was accomplished by wrapping the outside of the cylinder with refrigerating coils similar to the ones in the ordinary domestic refrigerator. The metal cylinder positioned vertically was closed on the lower end with the upper end open. Water flowed into the cylinder and solidified into ice on the interior wall of the cylinder. A spiral shaped screw or auger is positioned in the center of the cylinder, situated so that as it was rotated by a motor mounted on the exterior of the cylinder. The edge of the auger scraped the ice from the wall of the cylinder. The ice rose on the spiral of the auger to the top of the machine as the auger rotated. The ice reaching the top was discharged into a storage bin.

The Nitsch machine never achieved significant commercial success because it contained a serious defect. If too many water droplets were trapped between the particles of ice, the ice would lump together and form a slushy ice that was not marketable. On the other hand if the ice flaked from the cylinder wall did not contain enough water, a mass was formed causing the auger to jam. Although there was a very narrow range in which the machine could operate, varying types of water in different parts of the country, which freeze at different rates, caused a serious problem of keeping the machine adjusted properly. The balance necessary to produce salable ice in the Nitsch machine kept it from being commercially successful.

Both the Trow machine and the Kuebler machine were designed to produce salable ice without jamming, by a method other than regulating the amount of water between the flaked ice.

The Trow Machine

The Trow machine operates in a manner similar to the Nitsch machine, with the frozen ice mixed with water rising in the cylinder due to the rotation of the spiral auger. At the upper end of the cylinder a "breakerhead" is mounted so that the rising ice is conveyed against the underside of a mold-board-like surface. The pressure of the slushy ice produced by the force upward by the spiral auger is sufficient to press the ice against the "breakerhead" and force most of the water from the ice and compress the ice so that when discharged into the storage bin it has a 70-30 or 80-20 ratio of ice to water. The "breakerhead" also breaks the ice into small compact chips or flakes. The demonstration of the machine to the District Court showed that, absent the "breakerhead," the Trow machine would prduce only a slushy ice generally similar to that produced by the Nitsch machine, which is not marketable as flake ice.

The combination in the Trow invention of the prior art and the "breakerhead" for the first time made possible an inexpensive machine that would produce salable flake ice, in sufficient quantities and with enough reliability to be practical commercially.

The significance of this invention is reflected in the number of machines produced and marketed by King-Seeley. It is also reflected in the number of companies that have sought to copy the Trow machine. King-Seeley's patent and especially claim 4 thereof has been found valid in a number of reported decisions, including one from this Circuit: *King-Seeley Thermos Co.* v. *Millersville Mfg. Co.*, 296 F.Supp. 247 (M.D. Tenn. 1968), aff'd 412 F.2d 318 (6th Cir.); *King-Seeley Thermos Co.* v. *Tastee Freez Industries, Inc.*, 357 F.2d 875 (7th Cir.); *King-Seeley Thermos Co.* v. *Refrigerated Dispensers, Inc.*, 354 F.2d 533 (10th Cir.); *King-Seeley* v. *Cold Corp. of America*, 182 F.Supp. 768 (N.D.Ill.).

These decisions generally define the patented concept in the Trow machine as being a machine that produces commercially acceptable flake ice by mating the freezing idea of the Nitsch machine with a "breakerhead" which dewaters and compresses the ice into small compact pieces which then are are discharged into the storage bin.

The Kuebler Machine

The Kuebler machine (Uniflow's accused device) also operates on the basic freezing method of the Nitsch machine. The water level in the Kuebler maching is lower than in the Trow machine. At the upper end of the Kuebler machine there is positioned a "deflector" which Uniflow contends operates on a different principle than the Trow "breakerhead." It is contended that the "deflector" causes the ice flaked fro mthe cylinder wall to rotate more rapidly while moving upward and that this rotation of the ice in the cylinder, above the water level, produces ice at the "deflector" with less water content and that the ice is so dry that no dewatering is necessary. Uniflow contends that its "deflector" in addition to providing rotation merely breaks up the ice and forces it into the storage bin. During the demonstration before the District Judge, it was observed that some water did flow from the ice hitting the "deflector."

Claim 4 of the 694 patent

The parties limited the controversy at trial to the scope of claim 4 of the 694 patent and whether that claim was infringed by the Kuebler machine.

Claim 4 of the 694 patent reads:

(a) "4. An ice chip producing machine comprising

(b) an elongated freezing chamber having an open end,

(c) means for supplying water to the inside of said freezing chamber,

(d) means for cooling at least a portion of said freezing chamber to freeze ice on the inside surface thereof,

(e) an ice conveying auger rotatably mounted in the freezing chamber with its spiral edge disposed in closely spaced relation to the inside wall of said chamber,

(f) means for constantly rotating the auger to cause said spiral edge to shear off ice frozen on the inside wall of the chamber constantly to deliver ice to said open end of the freezing chamber,

(g) and an outwardly inclined ice disintegrating and removing member positioned in said open end of the chamber and provided with an ice peeling, mold-board-like surface positioned to engage ice carried by the auger,

(h) said constant rotation of the auger serving positively and constantly to convey ice to and force it against said mold-board-like surface to break up and positively remove ice from the auger and discharge it as discrete ice chips.'

King-Seeley and Uniflow produced expert witnesses whose qualifications were not assailed. Both experts testified as to the method of operation of the respective machines, and demonstrated the machines to the court. The District Judge thus had the benefit of observing the demonstrations of the machines as well as being able to evaluate testimony of the experts as they explained the operations of the machines.

Uniflow contends that its "deflector" serves to impart rotation to the ice and by this rotation the ice remains in the cylinder longer and thus is hard ice at the time it reaches the top of the cylinder and has no need of the dewatering "breakerhead" that is the essence of the King-Seeley patent. Reliance is placed on *Millersville Mfg. Co.*,

supra, as support for the proposition that to infringe the King-Seeley patent that, "the device must dewater slushy ice at the breakerhead." In *Millersville* the freezing cylinder contained a tapered auger so that as the ice rose in the cylinder the water was forced from the ice and by the time that it reached the top of the cylinder it was dry or salable. In *Millersville* the District Court found that the accused machine, with the deflector cap (similar to the accused "deflector" here) removed, still made salable ice. *King-Seeley Thermos Co.* v. *Millersville Mfg. Co.*, 296 F.Supp. 247 (M.D. Tenn.). The District Court noted "that test made on defendant's machine without the deflector cap showed that it would produce commercially usable ice; further that there was no noticeable difference between the dryness of the chips produced with the deflector cap removed or in place." Id. at 251. In *Millersville* the "deflector cap" merely forced the ice into cutting blades that chipped it prior to discharge into the storage bin.

King-Seeley at trial and on appeal contends that the "deflector" of the accused machine in fact does some dewatering and is used for the same purpose as the "breakerhead" in its patented machine.

The District Judge found:

> "I find as a fact that from the testimony of the two aforementioned experts there is a conflict in the testimony as to whether or not sections (g) and (h) of Claim 4 of the patent in suit read upon the accused device.
>
> "From the demonstrations conducted in the jury room by the Plaintiff and the Defendant on the machines manufactured by the Plaintiff and by the Defendant, I find that the function and operation of the ice making machines covered by the patent in suit and the function and operation of the ice making machines covered by Knebler Patent No. 3,319,438 are substantially identical and that the ice flakes produced by

the machine covered by the patent in suit and the accused device are practically identical in substance and in design. And from the jury room demonstration I resolve the conflict in the testimony of the experts as to sections (g) and (h) of Claim 4 by finding as a fact that Claim 4 of the patent in suit literally reads on the accused device.

"I find as a fact that mold boards consist of multiple types of surfaces, to the extent that a mold board-like surface, as recited in Claim 4, could include any type of surface that could or would be so positioned as to engage the ice that rides up onto this surface by the action of the auger in the chamber while this accused ice making machine and/or the ice making machine manufactured in accordance with the patent in suit are is in operation. I further find that Claim 4 of the patent in suit is valid and infringed by the accused machine manufactured by the Plaintiff and by the accused machines in the possession of the Third Party Plaintiff."

Uniflow contends that there is no conflicting testimony in this record and only issues of law are presented on this appeal. An examination of the appendices reveals to our satisfaction that conflicting testimony was presented before the District Judge.

King Seeley's expert, Dr. Colburn testified in regard to the Trow machine that:

"So, there's a breaking in the same sense as there is in the defendant's machine. *The water drains down between the layers.* These broken up pieces are compacted by the compression which is occasioned by the ice being pushed up against that floating ramp ["deflector"]. So, the pieces that were originally broken are compressed into little chips of a different shape and size. *Some water is squeezed out, some water drains*

out. These pieces are then deflected out through the delivery shoot, 22." (Emphasis added.)

The Uniflow expert testified in regard to the same machine:

"The Court: It is your position that there is no compression in the delivery of the ice?

A. The ice is hard enough, firm enough by the time it is in the path of the auger, *there is no compression in the form of squeezing and dewatering the ice*. There is no need for compression. It is already 80%, approximately 80% ice by the time it reaches up between the flight, the top flight of the auger and the head.

The Court: Your answer is that there is no compression?

A. There is no compression and dewatering." (Emphasis added.)

There was also a conflict as to whether Uniflow's deflector compressed the ice causing it to crack, which produced the following exchange:

King-Seeley's counsel:

"Assuming we follow your theory that there is no compression whatsoever in your machine, is that right? A. It's not only a theory, it's a fact.

"Q. Let me ask you this question. If in viewing your device in operation through a plastic sleeve where I can see it, what's happening? If I see any fracture or cracking of the ice coming up against the underside of that ramp, can you tell me what would cause that fracturing or cracking other than a compressive force? A. We showed that there was no fracturing or cracking when we peeled the ice off, the ice directly under the head was not fractured. We showed when we took your head off that the ice was fractured.

"Q. I'm talking about looking in through the plastic tube. What I would see with my eye as I look in there at the ice rising up in that plastic tube, if I saw the fracturing or cracking, it could only be caused, that fracturing or cracking effect could only be caused by compressive force being caused by the engagement of the ice between the auger flights and the underside of the deflector heads, isn't that right? A. We didn't see fracture.

"Q. I didn't ask you if you saw it. I asked you if it was a fact if I did see it and I think I saw it.

"The Court: *I know I saw it.*" (Emphasis added.)

The finding by the District Judge that there was a conflict in the testimony of the experts is a finding of fact as is his finding of infringement. Findings of fact of a trial judge in a patent case can only be overturned on appeal if the reviewing court finds them to be clearly erroneous. Rule 52(a), Fed.R.Civ.P.; *Maytag Co.* v. *Murray Corp. of America*, 318 F.2d 79 (6th Cir.) and cases cited therein at page 82.

Having examined the evidence before the District Court and giving due regard to the fact that the District Judge saw the machines in operation and observed the witnesses as they explained the machines, we do not find that his conclusions as to the conflict of testimony, the validity of the 694 patent or the infringement of claim 4 thereof by the accused machine to be clearly erroneous.

We therefore affirm the decision of the District Court in regard to the findings of validity and infringement.

Attorneys' Fees

The District Court in its conclusions of law held: "That the Defendants, King-Seeley Thermos Co., be awarded its taxable costs and reasonable attorneys' fees." Uniflow contends that the court erred in awarding attorneys' fees without making a specific finding that the case was an ex-

ceptional case under 35 U.S.C. § 285. This statute provides: "The Court in exceptional cases may award reasonable attorneys' fees to the prevailing party."

Uniflow contends correctly that the awarding of fees is the exception and not the rule. *Monolith Portland Midwest Co.* v. *Kaiser Aluminum & C. Corp.*, 407 F.2d 288 (9th Cir.); *Hoge Warren Zimmerman Co.* v. *Nourse & Co.*, 293 F.2d 779 (6th Cir.). It is argued that fees should be awarded in cases where the conduct of the losing party may be characterized as unfair and vexatious or involves bad faith or some other equitable consideration that would make it unjust for the party prevailing to have to bear its own attorneys' fees, citing *Henry J. Kaiser Co.* v. *McLouth Steel Corp.*, 257 F.Supp. 372, aff'd, 400 F.2d 36 (6th Cir.), cert. denied, 396 U.S. 1119. It is contended that the absence of a finding of these factors by the District Court precludes the affirmance of the award.

King-Seeley contends that this is the type of case that the statute was intended to cover. It is argued that the award of fees was made under the statute, within the sound discretion of the District Judge and should not be reversed unless found to be capricious or erroneous as a matter of law. Reliance is placed upon *Turchan* v. *Cincinnati Milling Machine Co.*, 208 F.2d 228 (6th Cir.). In that case fees were denied and this court affirmed the denial, holding it to be a valid exercise of the discretion of the District Court. The question on the present appeal is whether an award of fees can be upheld absent a specific finding of bad faith or some similar criteria. This question not answered in *Turchan*.

This Court has had occasion to examine 35 U.S.C. § 285, *Hoge Warren Zimmerman Co.* v. *Nourse & Co.*, *supra*, 293 F.2d 779 (6th Cir.), saying:

> "[I]n relation to section 285 the cases are in accord that its application is discretionary with the District Court. Former section 70 so provided, and it has been

held that the substitution of the phrase 'in exceptional cases' has not done away with the discretionary feature. 'Both before and after the change in wording this Court has interpreted this section as making the trial court's determination of attorney's fees final *where it has clearly stated the basis for the award*, "except where there is an abuse of discretion amounting to caprice or an erroneous conception of the law on the part of the trial judge."' Talon v. Union Slide Fastener, 9 Cir. 1959, 266 F.2d 731, 739; Carolina Lee Knitting v. Johnson & Johnson, 4 Cir., 1960, 275 F.2d 91. Also see the discussion of this subject by Judge O'Sullivan of this Court in an opinion by him as a district judge, cited as Clinton Engines v. Briggs & Stratton, D.C. 1959, 175 F. Supp. 390, 401-403. It is clear from the cases decided under section 285 that the determination of the district court will not be upset unless there has been an abuse of discretion. . . .

"[E]xceptional circumstances have been interpreted as incorporating concepts of fraud, malice, bad faith and other similar concepts, . . ." (Emphasis added.) 293 F.2d at 783-84.

The cases that have spoken to this question indicate that for an award of attorneys' fees to be upheld the trial court must have found unfairness, bad faith or inequitable or unconscionable conduct on the part of the losing party. *Purer & Co. v. Aktiebolaget Addo*, 410 F.2d 871, 880, (9th Cir.), cert. denied, 396 U.S. 834; *Rohr Aircraft Corp. v. RubberTeck Inc.*, 266 F.2d 613, 624 (9th Cir.); *Glen Mfg. Inc. v. Perfect Fit Industries, Inc.*, 299 F.Supp. 278, 285 (S.D. N.Y. 1969); See also *Minnesota Mining & Mfg. Co. v. Northern Co.*, — F.2d — (Nos. 18,596-97, June 1, 1970 6th Cir.). No such finding was made by the District Court in the present case.

Absent a specific finding by the District Court that would bring the case within the definition of the term "excep-

tional case" as set forth in 35 U.S.C. § 285 and interpreted by the cases set above, we hold that the award of attorneys' fees cannot stand.

We therefore reverse the decision of the District Court in regard to its award of attorneys' fees.

The decision of the District Court is affirmed in regard to its findings of the validity of the 694 patent and infringement by the accused machine.

The case is remanded for further proceedings not inconsistent with this opinion.

APPENDIX C

Opinion of the District Court

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

UNIFLOW MANUFACTURING COMPANY, *Plaintiff*,
JEFFERSON ICE CO., *Third Party Plaintiff*,

v.

KING-SEELEY THERMOS CO., *Defendant*.

Civil Action No. 30,578

This is an action brought by Plaintiff, Uniflow Manufacturing Company, for declaratory judgment of patent invalidity and non-infringement with respect to United States Patent No. 2,753,694, issued July 10, 1956, entitled "Ice Disintegrating and Chip Delivering Spiral Ice Chip Producing Machine," owned by Defendant, King-Seeley Thermos Company. Defendant has filed a counterclaim charging Plaintiff, Uniflow Manufacturing Company, with infringement of the aforesaid patent, No. 2,753,694 (hereinafter referred to as the '694 patent).

Prior to the filing of this action, Defendant, King-Seeley Thermos Company, had brought an action for infringement of the '694 patent against Jefferson Ice Company in the United States District Court for the Northern District of Illinois. Jefferson Ice Company is admittedly a distributor of the Uniflow Manufacturing Company's machines accused of infringing the patent in suit. Jefferson Ice Company then intervened as a third party plaintiff in this suit, so that both Uniflow Manufacturing Company and Jefferson Ice Company are accused by Defendant, King-Seeley Thermos Company, of infringing the '694 patent. Plaintiff, Uniflow Manufacturing Company, is a Pennsylvania corporation, having its principal offices at Erie, Pennsylvania. Jefferson Ice Company is an Illinois corporation, located in Chicago. Defendant, King-Seeley Thermos Co., is a Michigan corporation, having offices at Ann Arbor, Michigan.

It has been stipulated by the parties that the '694 patent is owned by Defendant, King-Seeley Thermos Co., a Delaware corporation, which was substituted as defendant for King-Seeley Thermos Co., a Michigan corporation, under an order signed by this Court on January 20, 1969. It is further admitted that the present defendant is possessed of all rights under the '694 patent, including claims against others by reason of infringement of said patent.

The Defendant, in its brief, states that the patent in suit is a machine for making what is referred to in the trade as flake, crushed or chip ice (as distinguished from cube ice). Production costs for this type of ice are relatively low. By volume the ice is composed of small discrete pieces of ice which can be molded, scooped and easily handled or pyramided for display purposes. It is widely used by the food service industry, restaurants, snack-bars, drive-ins, hospitals, supermarkets, etc. In order to be acceptable and saleable as flaked and chipped ice, the ice cannot be slushy but must consist of discrete

relatively hard chips or flakes which will not weld together and which will remain as separate flakes or chips in a storage bin so they can be scooped, molded and easily handled.

The Plaintiff has asked the Court to hold that the ice flake machine disclosed in Kuebler Patent No. 3,319,438 which was granted to Uniflow on May 16, 1967, does not infringe King-Seeley's Trow Patent No. 2,753,694. Plaintiff, Uniflow, further contends that the Trow patent cannot be interpreted broadly enough to cover its ice making machine, and that if so interpreted, the Trow patent is invalid.

Plaintiff, in its brief, further relates that in about 1960 it was purchasing the basic parts for an ice flake machine from the Freeze King Company and that it was notified of the Trow patent by Defendant. On advice of counsel Plaintiff denied infringement and heard no more from Defendant about the matter until Defendant sued Plaintiff's customer, Jefferson Ice Company, in Chicago, some six years later.

Plaintiff further contends that the machines purchased by Plaintiff from Freeze King were not satisfactory and caused a great deal of trouble in the hands of customers. As a result, Plaintiff assigned Charles Freese, an engineer, to work with Tom Kuebler to develop an ice flake machine that would avoid the previously experienced troubles.

Plaintiff further relates that in about 1962 Charles Freese and Thomas Kuebler completed the design of their first concept of an ice making where the ice was deflected from the freezing chamber by a blade. Application for Patent, Serial No. 359,634, was filed in the United States Patent Office. This patent application was later abandoned. Charles Freese and Thomas Kuebler then designed the ice flake machine covered by Patent No. 3,319,438, filed May 14, 1964, which is now charged by Defendant to infringe the '694 patent.

The Defendant, King-Seeley Thermos Co., in this lawsuit accuses the Plaintiff of infringing only Claim 4 of the '694 patent.

The pretrial conference in this matter and the opening statement of counsel for the respective parties have narrowed the issue to be determined by the Court upon the evidence submitted by the parties to the scope of Claim 4 of the patent in suit, as it relates to the Plaintiff's accused structure's infringing or not infringing said claim.

At the pretrial in this matter it was further decided that, although this is a complaint for declaratory judgment, the Defendant should lead off with its counterclaim for infringement of Claim 4. From the evidence submitted by the respective parties the Court makes the following findings of fact and conclusions of law.

Findings of Fact

For the purpose of reference-clarity in trial presentation, Claim 4 of the patent in suit, No. 2,753,694, here as Exhibit 9, was separated by phrase into eight sections lettered (a) through (h) as follows:

"(a) 4. An ice chip producing machine comprising

(b) an elongated freezing chamber having an open end,

(c) means for supplying water to the inside of said freezing chamber,

(d) means for cooling at least a portion of said freezing chamber to freeze ice on the inside surface thereof,

(e) an ice conveying auger rotatably mounted in the freezing chamber with its spiral edge disposed in closely spaced relation to the inside wall of said chamber,

(f) means for constantly rotating the auger to cause said spiral edge to shear off ice frozen on the inside

wall of the chamber constantly to deliver ice to said open end of the freezing chamber,

(g) and an outwardly inclined ice disintegrating and removing member positioned in said open end of the chamber and provided with an ice peeling mold-board-like surface positioned to engage ice carried by the auger,

(h) said constant rotation of the auger serving positively and constantly to convey ice to and force it against said mold-board-like surface to break up and positively remove ice from the auger and discharge it as discrete ice chips."

The Defendant, King-Seeley, offered William Colburn of Highland Park, Illinois, as an expert, without objection as to his qualifications. Mr. Colburn is the owner and president of Colburn Laboratories, Inc. of Chicago, Illinois. He obtained a Bachelor of Arts degree in Chemistry from the University of Chicago in 1235, and a Ph.D. in Chemistry from the University of Chicago in 1938. He is a licensed engineer in the State of Illinois, was an instructor in Physical Science in the Chicago City Junior College for four years and a part-time lecturer in Physical Science at Roosevelt University of Chicago for five years; he has given two short courses at the University of Chicago in Emulsion Technology. For about five years he was chief chemist at a consulting laboratory in Chicago, and for two years subsequent to that he was chief chemist for Ninol Laboratories, manufacturers of detergents. In 1945 he established his own business as the owner of Colburn Laboratories, Inc. He has testified as an expert in about twelve patent suits involving products liability, accidents and explosives, and, in relation to the '694 patent here in suit, he has testified in five prior cases; he has had experience in testing refrigeration machines for Norge Corporation and for Montgomery Ward; he has worked on design of parts, controls and other features of refrigera-

tion machines; he has assisted in the designing of a refrigeration system for a large food processing company; he has done considerable work with water, water treatment, water pollution and other problems pertaining to water; he has also experimented with the effects of ice making machines on water of different compositions, since the composition and temperature of water vary greatly from community to community. The temperature of the water fed into an ice making machine will have some effect on the ice made by the machine, and traces of impurities in the water have an even greater effect on the ice making operation. Mr. Colburn was completely familiar with the '694 patent here in suit, having studied this patent on a number of occasions in connection with patent suits. He was also familiar with the Plaintiff's accused ice making machine, having acquired two of the Plaintiff's machines and having run them, examined them and experimented with them. From this background Mr. Colburn demonstrated the workings of Defendant's ice making machines covered by the patent in suit. He also demonstrated the working of ice making machines of the Plaintiff covered by the Plaintiff's patent, Kuebler Patent No. 3,319,438, the said ice making machines of the Defendant and the Plaintiff having been set up and operated in the jury room of the Court.

Thomas Kuebler was presented as an expert by the Plaintiff and was accepted as an expert without objection to his qualifications. He is President of the Uniflow Manufacturing Company, Plaintiff herein, and has been associated with the Uniflow Manufacturing Company from 1940 to 1948 in part-time employment, and from 1948 until the present dedicating his full time to Uniflow, being President of Uniflow at the time of trial. He specialized in the sciences in prep school, and when he got to Massachusetts Institute of Technology he was able to go ahead of the normal classes. His studies at this institution were interrupted by his service in the Armed Forces. While with

the United States Army he was able to get additional engineering training at Vanderbilt University; upon returning to M.I.T. he was able to take graduate courses in his senior year in refrigeration engineering, as he had already completed the prerequisites to entering that course—Thermo-Dynamics, Fluid Flow and Machine Design. As for practical experience in the ice making and ice flaking machine business, he has worked with ice making machine since 1955 and with ice flaking machines since 1960; regarding ice making machines, he participated in all sorts of work relating to design, development, trial testing model making and developing and getting a product on the market that was fail-free. He had experience with a Freeze King machine of two types, one of which was similar to the '694 patent. He has laboratory-tested ice making machines, including machines similar to the accused machine, and he has built models to demonstrate for his own benefit what was taking place in these machines. He placed clear plastic cylinders on top of the machines so that he could watch the operation in the cylinder. He has spent a large portion of his time since 1960, while at Uniflow, actually testing, making, operating, changing auger speeds and examining the results of ice flaking machines. He has also had experience with Defendant's ice making machine, having observed it in operation in certain locations. Mr. Kuebler conducted and supervised the Plaintiff's demonstration from actual ice making machines in the jury room during the progress of the trial. Prior to the trial Defendant and Plaintiff, Uniflow and King-Seeley, each had apparently purchased the ice making machine of the other and had conducted pretrial experiments in preparation for the jury room demonstration.

From the testimony of Mr. Colburn, Defendant's expert, the Court finds that Sections (a), (b), (c), (d), (e), (f), (g), and (h) of Claim 4 of the patent in suit read upon the accused device. From the testimony of Mr. Kuebler, the Plaintiff agrees that Sections (a), (b), (c), (d), (e), and (f)

of Claim 4 of the patent in suit read upon the accused device, but does not agree that Sections (g) and (h) of Claim 4 read upon the accused device. Although conceded that to some degree some parts of Sections (g) and (h) resemble parts and/or functions of the accused device, the Plaintiff's expert particularly denies that the accused machine has a mold-board-like-surface position to engage ice carried by the auger and insists that the so-called deflector head at the time of the chamber performs a different function in the accused device than it does in the device covered by the patent in suit.

I find as a fact that from the testimony of the two aforementioned experts there is a conflict in the testimony as to whether or not sections (g) and (h) of Claim 4 of the patent in suit read upon the accused device.

From the demonstrations conducted in the jury room by the Plaintiff and the Defendant on the machines manufactured by the Plaintiff and by the Defendant, I find that the function and operation of the ice making machines covered by the patent in suit and the function and operation of the ice making machines covered by Kuebler Patent No. 3,319,438 are substantially identical and that the ice flakes produced by the machine covered by the patent in suit and the accused device are practically identical in substance and in design. And from the jury room demonstration I resolve the conflict in the testimony of the experts as to sections (g) and (h) of Claim 4 by finding as a fact that Claim 4 of the patent in suit literally reads on the accused device.

I find as a fact that mold-boards consist of multiple types of surfaces, to the extent that a mold-board-like surface, as recited in Claim 4, could include any type of surface that could or would be so positioned as to engage the ice that rides up onto this surface by the action of the auger in the chamber while the accused ice making machine and/or the ice making machine manufactured in ac-

cordance with the patent in suit are/is in operation. I further find that Claim 4 of the patent in suit is valid and infringed by the accused machine manufactured by the Plaintiff and by the accused machines in the possession of the Third Party Plaintiff.

Conclusions of Law

The Court makes the following conclusions of law:

(1) That the Court has jurisdiction of the within action and the parties herein.

(2) Conflicts in the testimony are resolved by the trier of the facts.

(3) "A patentee is only required to describe the best method of practicing his invention but he is not confined to that. If his claim is broad enough, he may claim infringement 'if another uses the principle and appropriates the substance of his invention.' Grant Paper Box Co. v. Russell Box Co., 154 F. 2d 729, 731 (1st Cir. 1946). His claims are the measure of his invention." *Maxon* v. *Maxon Construction Company*, 395 F. 2d 330 (6th Cir. 1968).

(4) That Claim 4 of United States Patent No. 2,753,694 is valid and has been infringed by the Plaintiff, Uniflow Manufacturing Company.

(5) That an injunction be issued against further infringement by the Plaintiff, Uniflow Manufacturing Company, of said United States Letters Patent No. 2,753,694.

(6) That an accounting be had and Defendant, King-Seeley Thermos Company, be awarded its damages, as so determined, arising out of the infringement herein, by Plaintiff, Uniflow Manufacturing Company, of Claim 4 of the United States Patent No. 2,753,694.

(7) That the Defendant, King-Seeley Thermos Company, be awarded its taxable costs and reasonable attorneys' fees.

(8) That Claim 4 of United States Patent No. 2,753,694 is valid and has been infringed by the Third Party Plaintiff, Jefferson Ice Company.

(9) That an injunction be issued against further infringement by the said Third Party Plaintiff, Jefferson Ice Company, of United States Patent No. 2,753,694.

(10) That an accounting be had and Defendant, King-Seeley Thermos Company, be awarded its damages, in accordance therewith, as a result of the infringement by Third Party Plaintiff, Jefferson Ice Company, of Claim 4 of the Defendant's patent.

(11) That Defendant, King-Seeley Thermos Company, be awarded its taxable costs and reasonable attorneys' fees in relation to the Third Party Plaintiff, Jefferson Ice Company.

(12) The Defendant, King-Seeley Thermos Company, will submit an order in conformance with the foregoing, and may submit proposed supplemental findings of fact and conclusion of law if it so desires.

THOMAS P. THORNTON
Thomas P. Thornton
United States District Judge

Dated. Apr. 30, 1969